

Fig.4

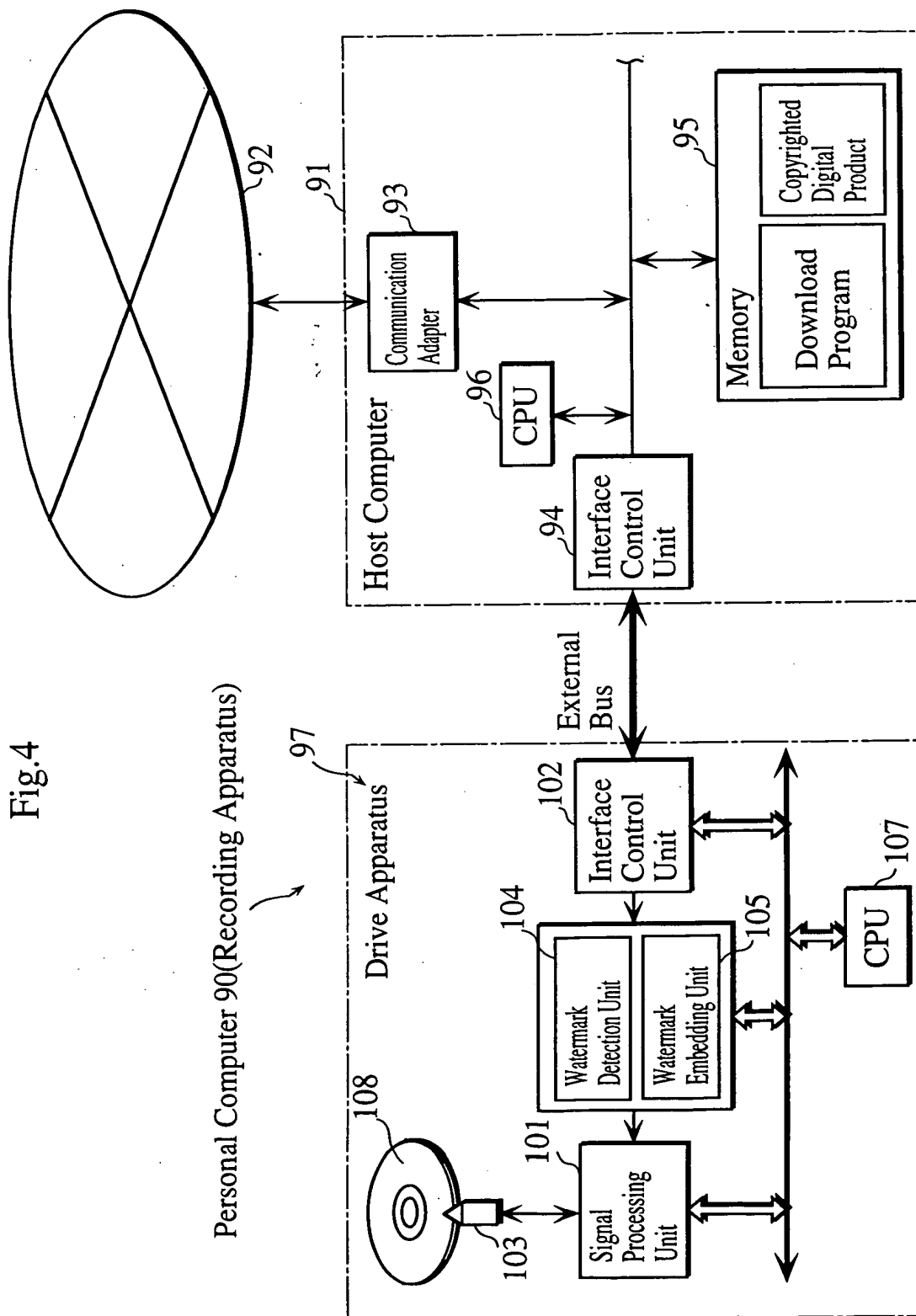
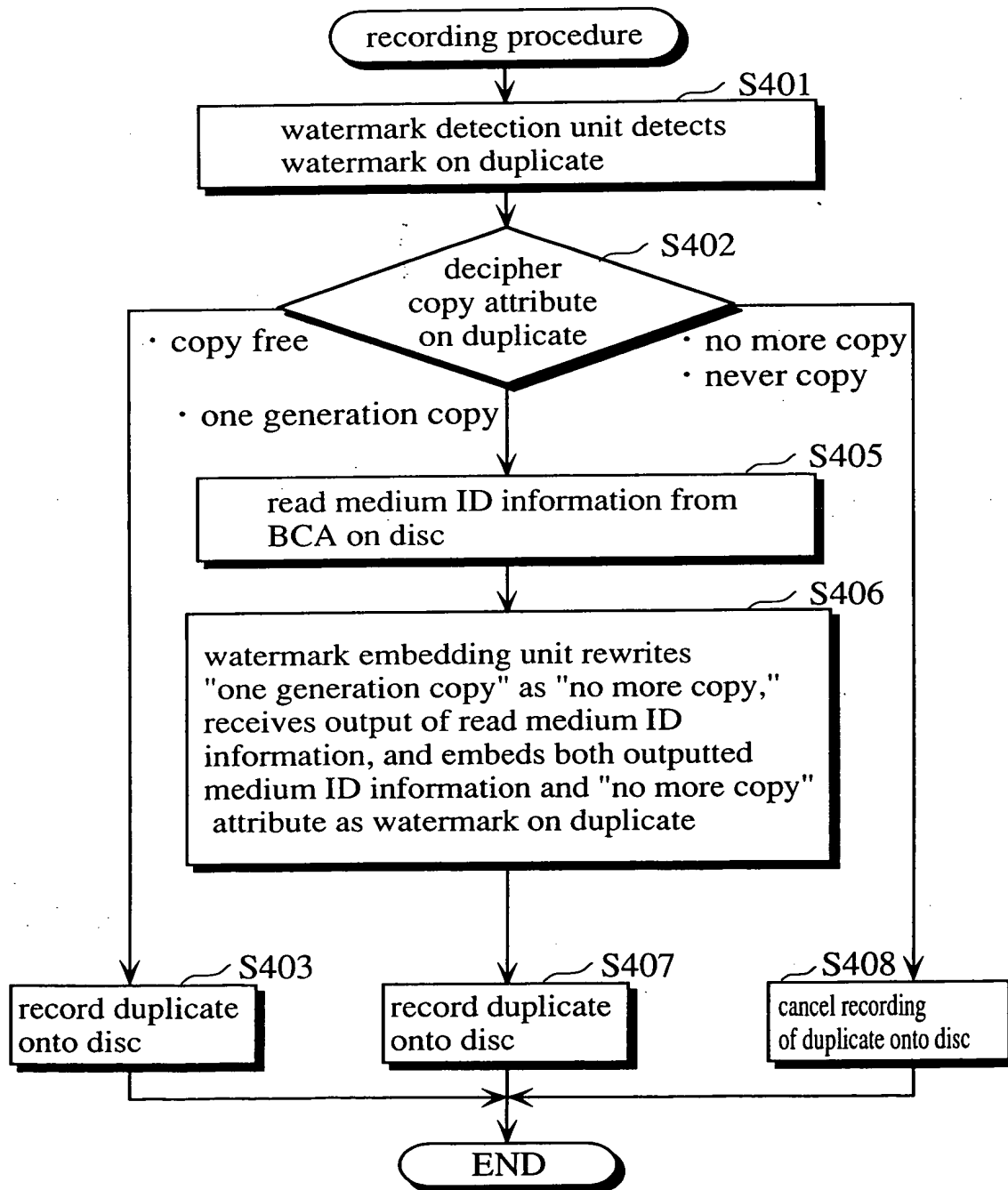


Fig.5



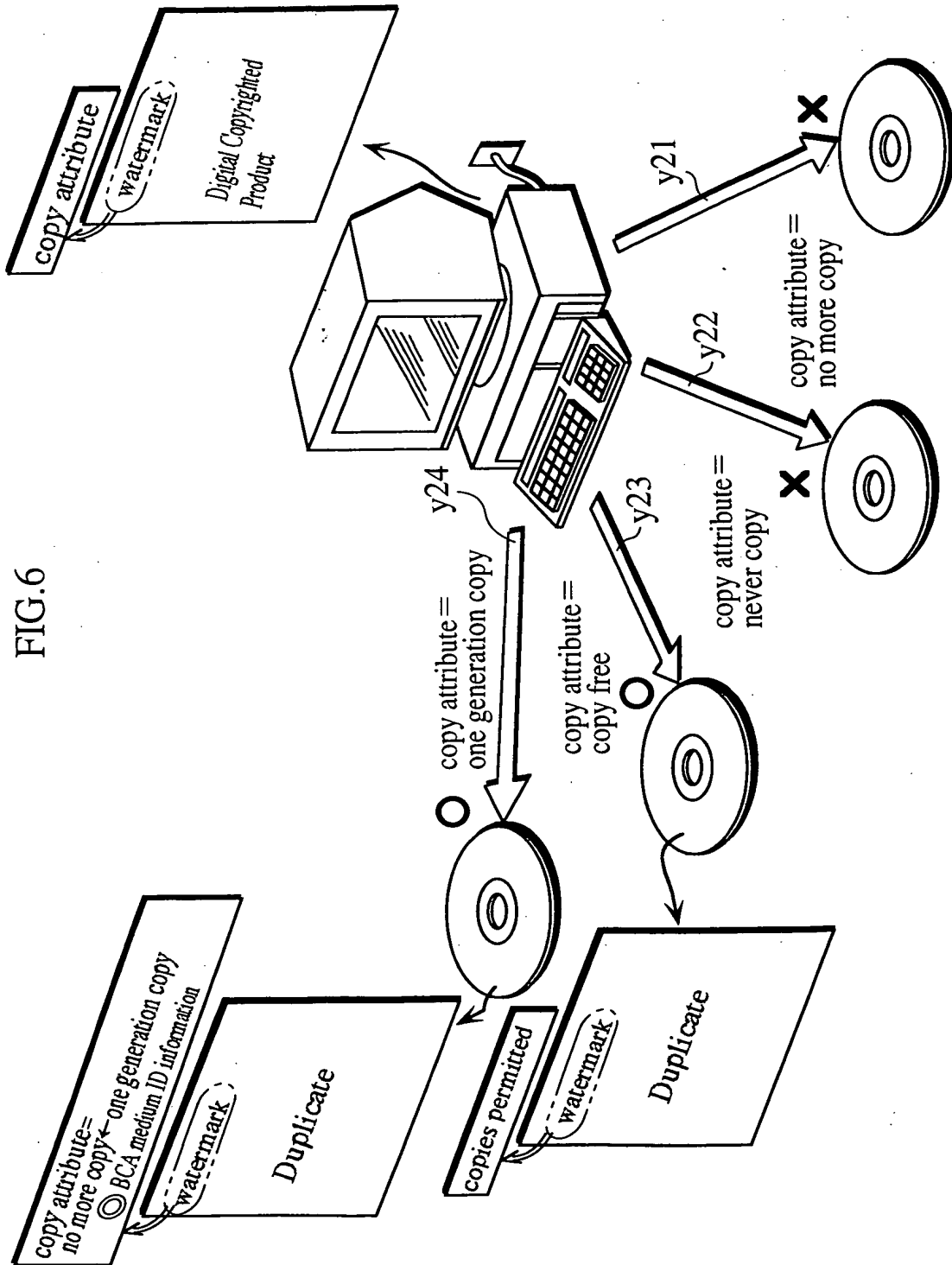


Fig.7B

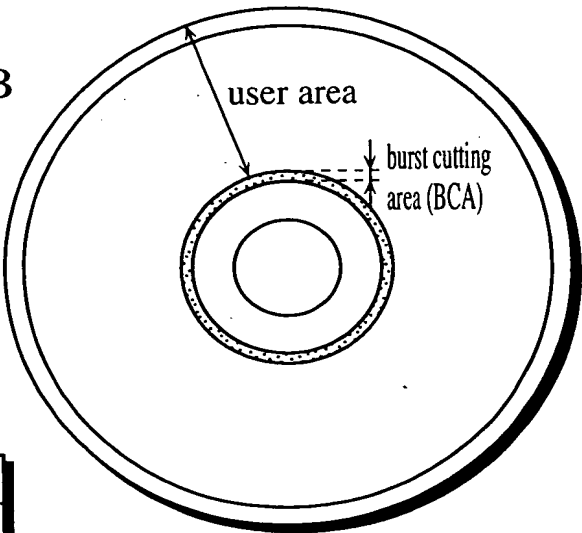


Fig.7A

copy attribute	
copy free	00
one generation copy	10
no more copy	11
never copy	01

Fig.7C

Copyrighted Digital Product

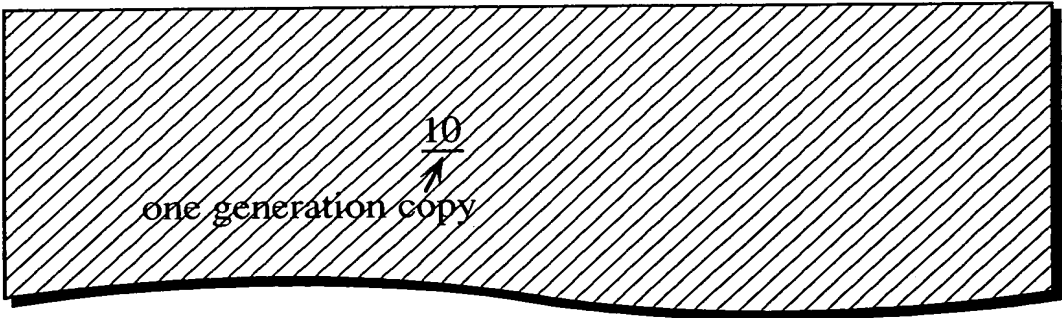
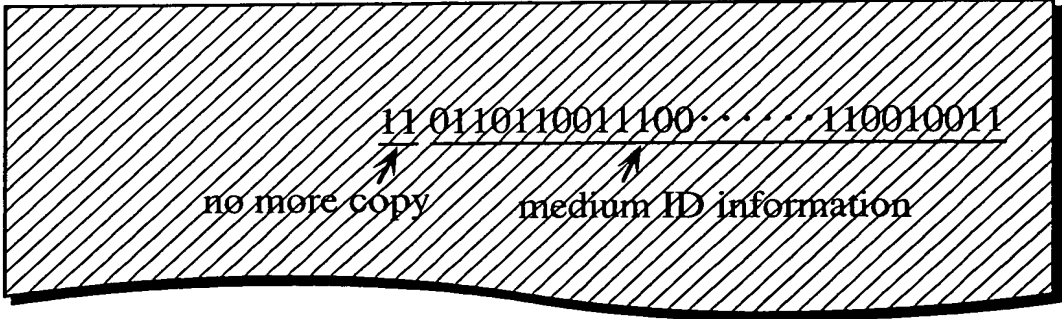


Fig.7D

Duplicate



09/914129 082301

Fig.8

Reproduction Apparatus

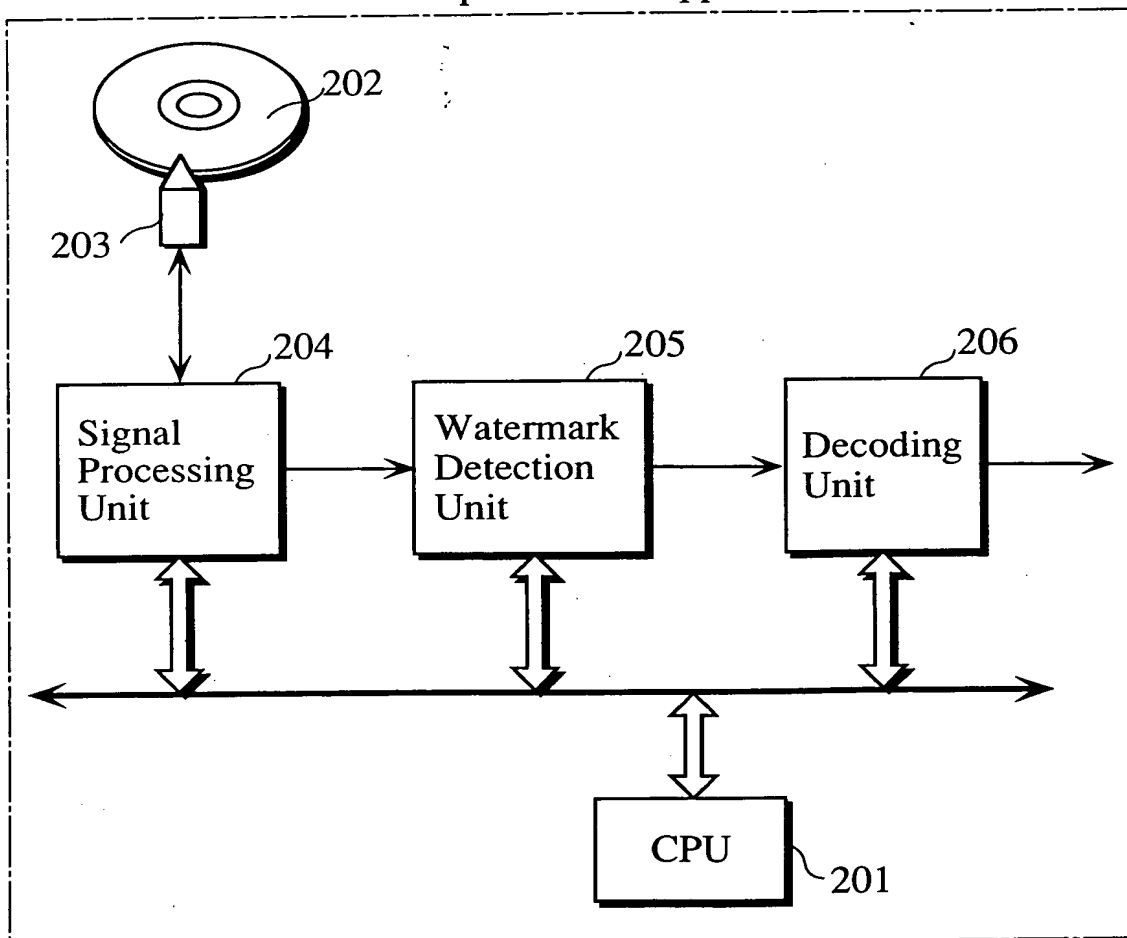
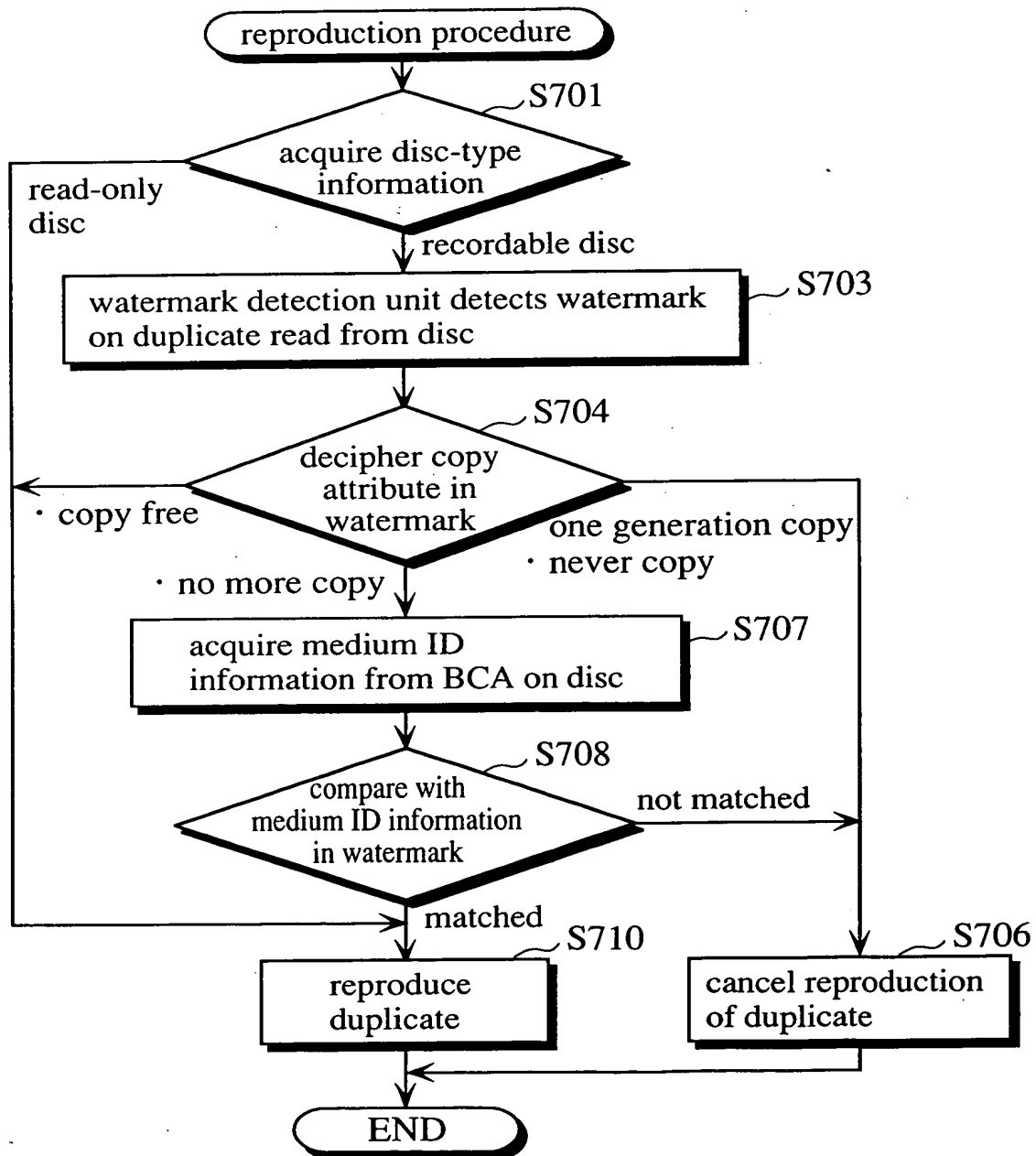


Fig.9



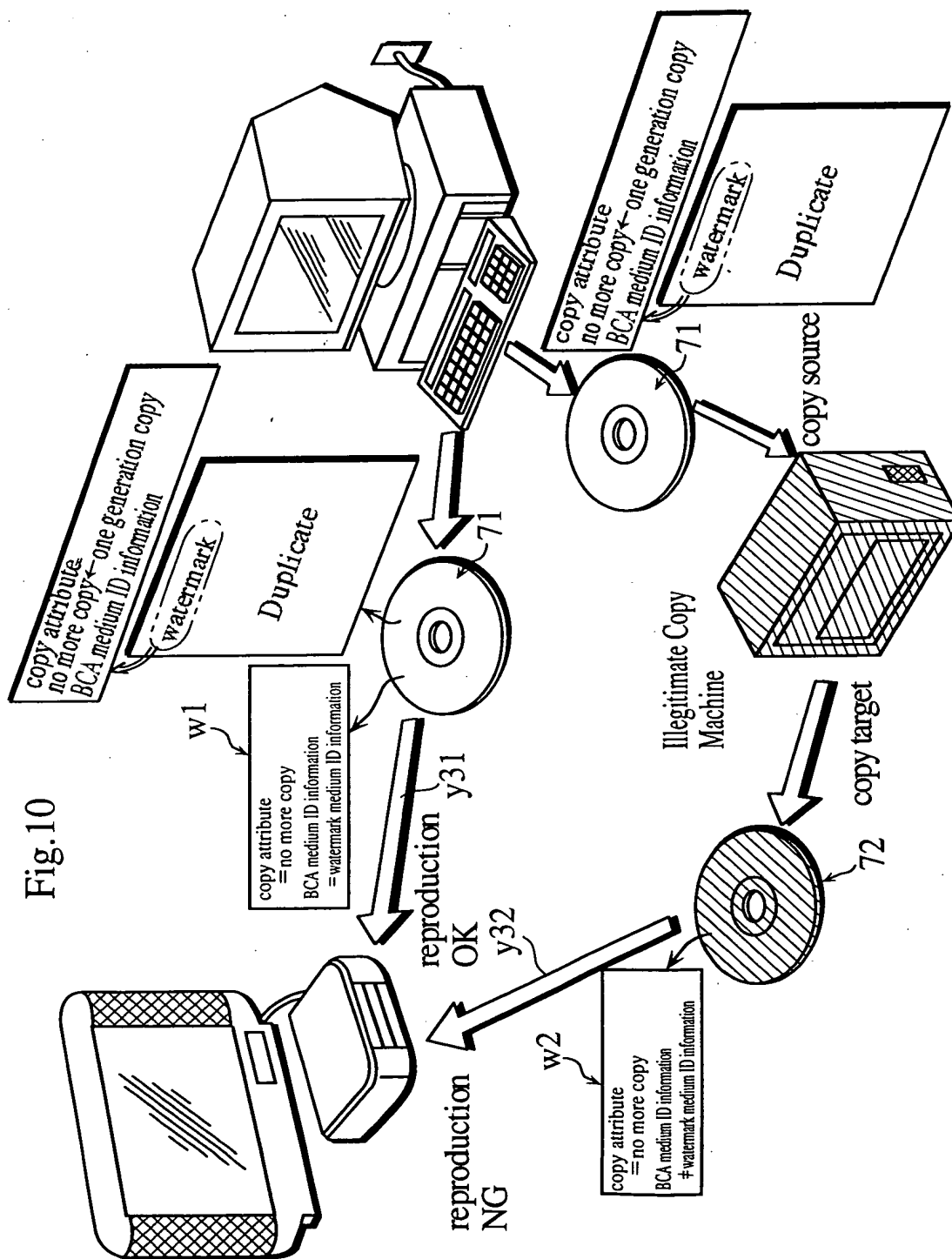


Fig.11A

○area code		
000 : United States	001 : Japan/Europe	010 : South Asia
011 : Latin America	100 : Asia/Africa	101 : China
110 : Reserved	111 : Special Area (plane, boat, etc)	

Fig.11B

Copyrighted Digital Product

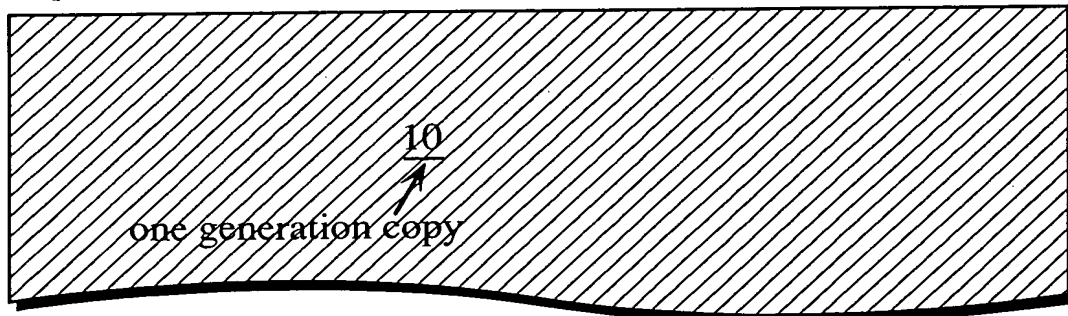


Fig.11C

Duplicate

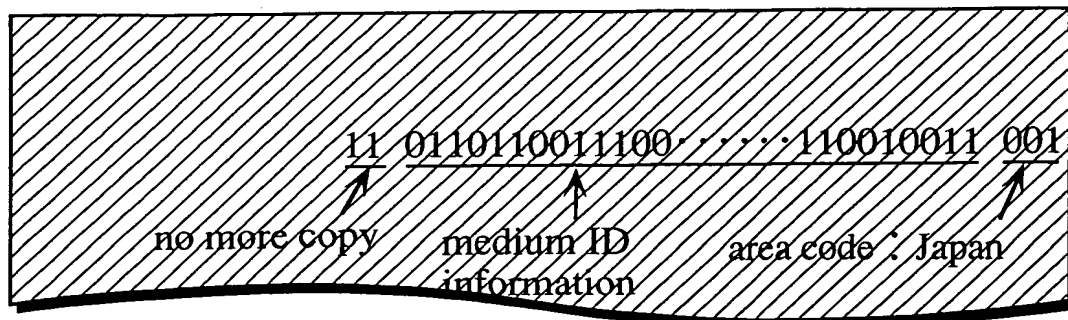
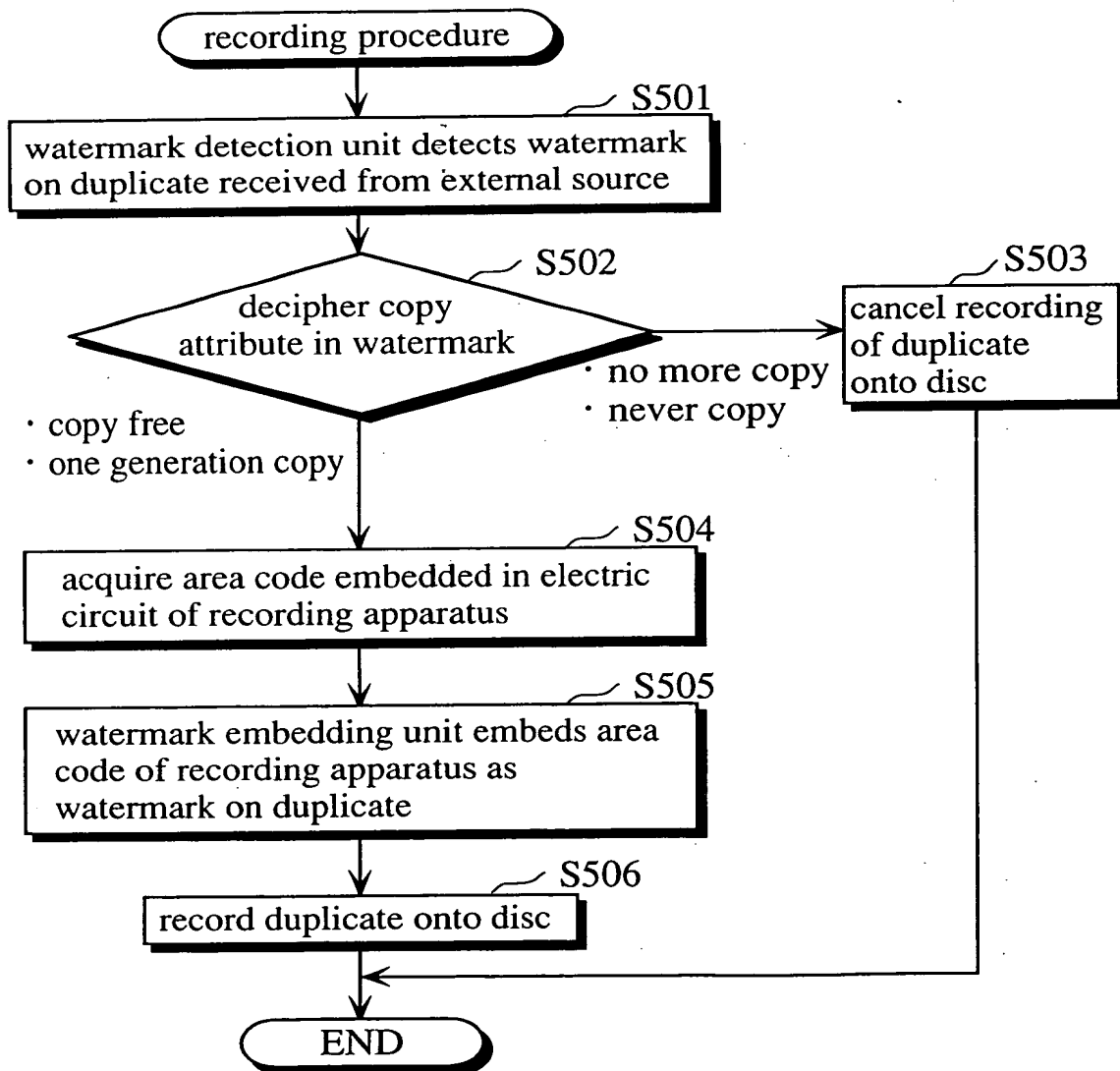


Fig.12



09/914129-000001

FIG. 13

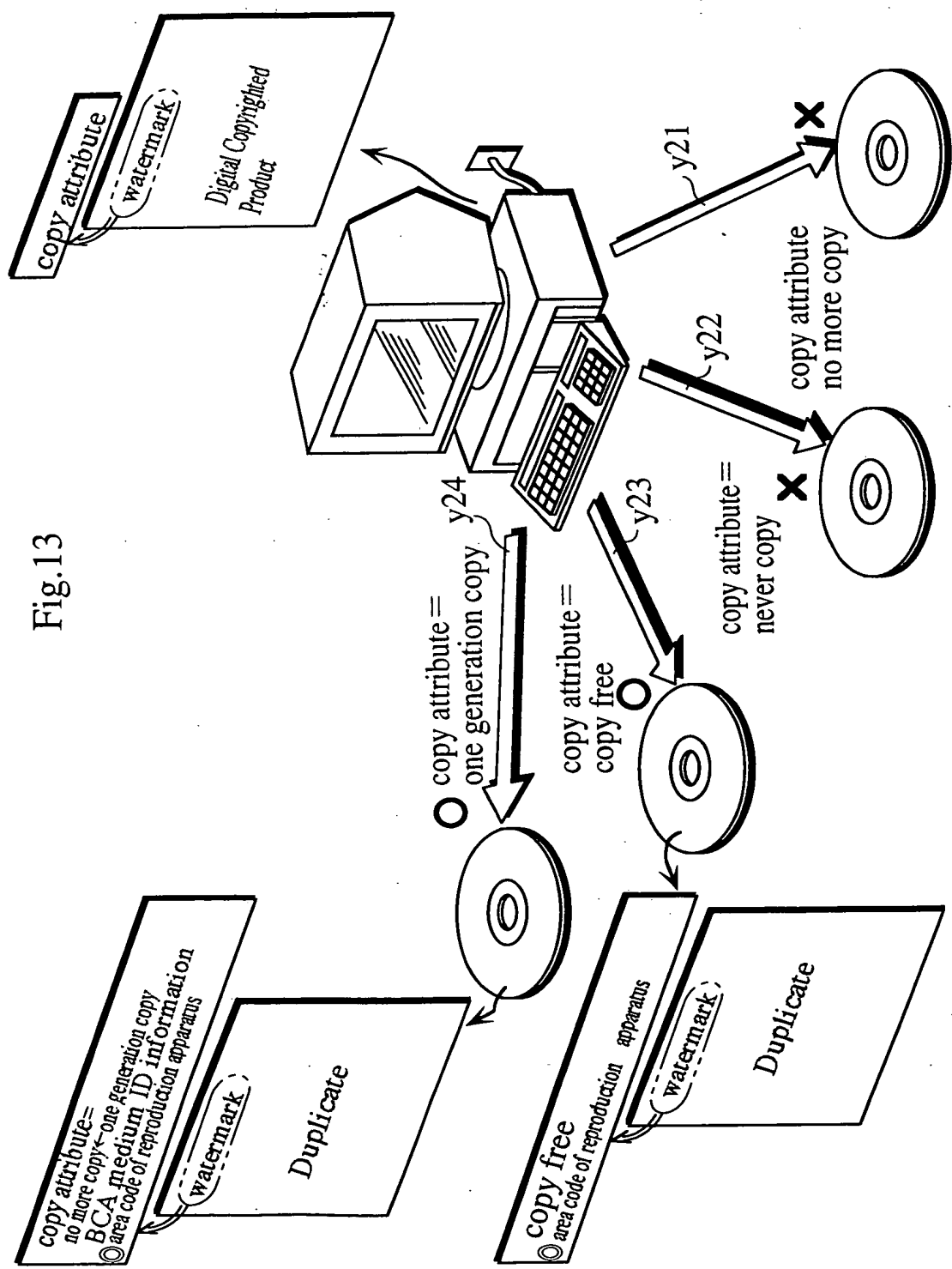
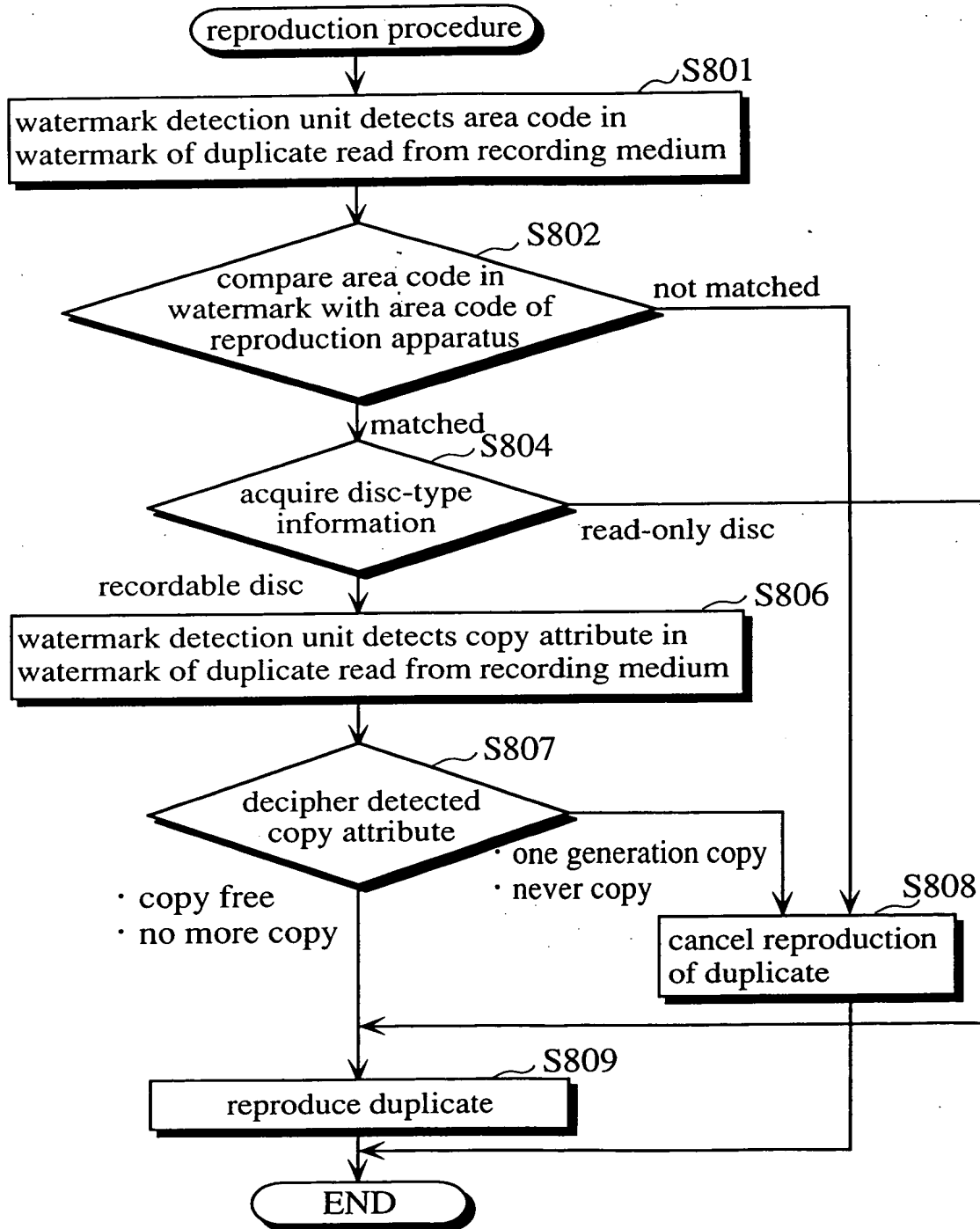
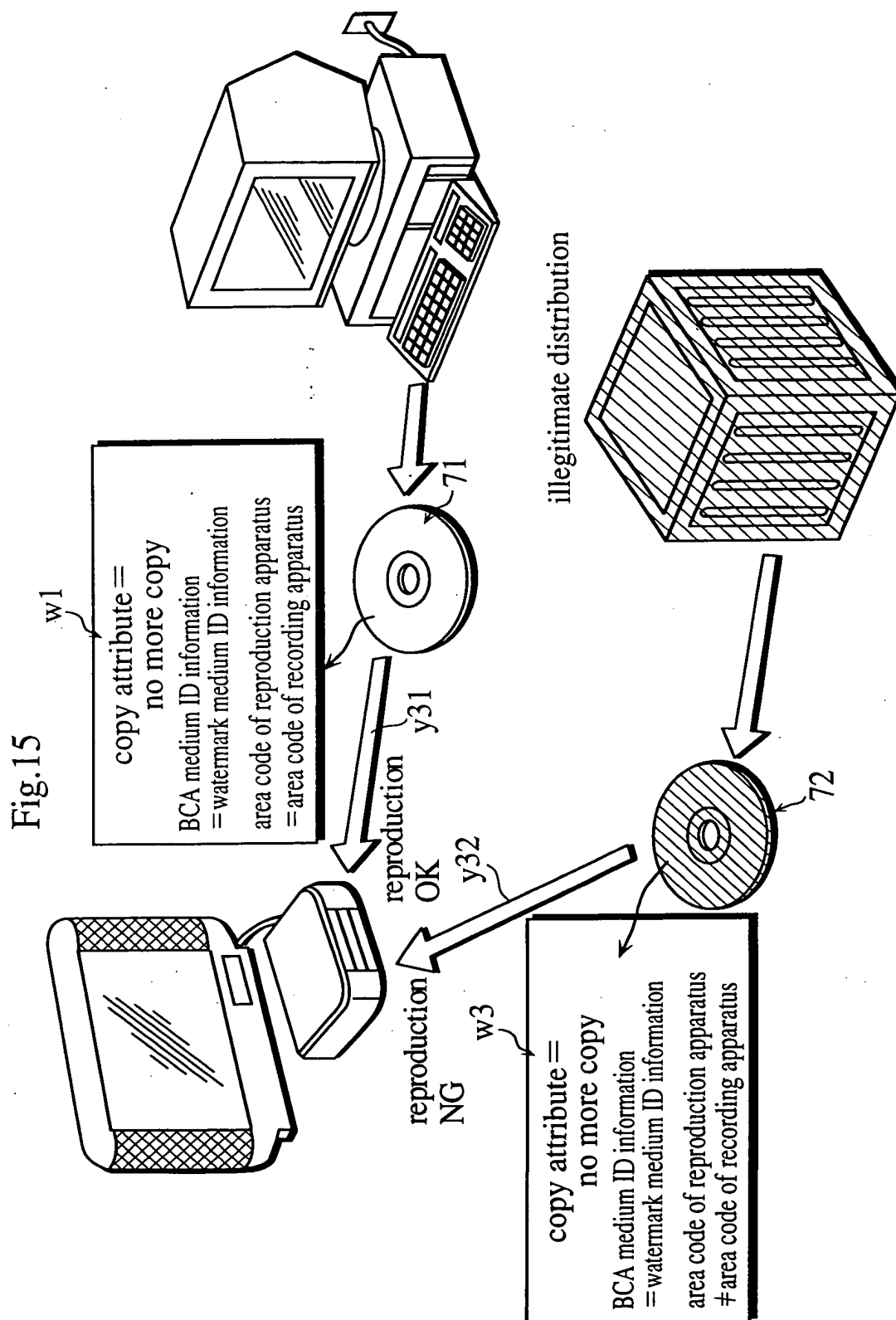


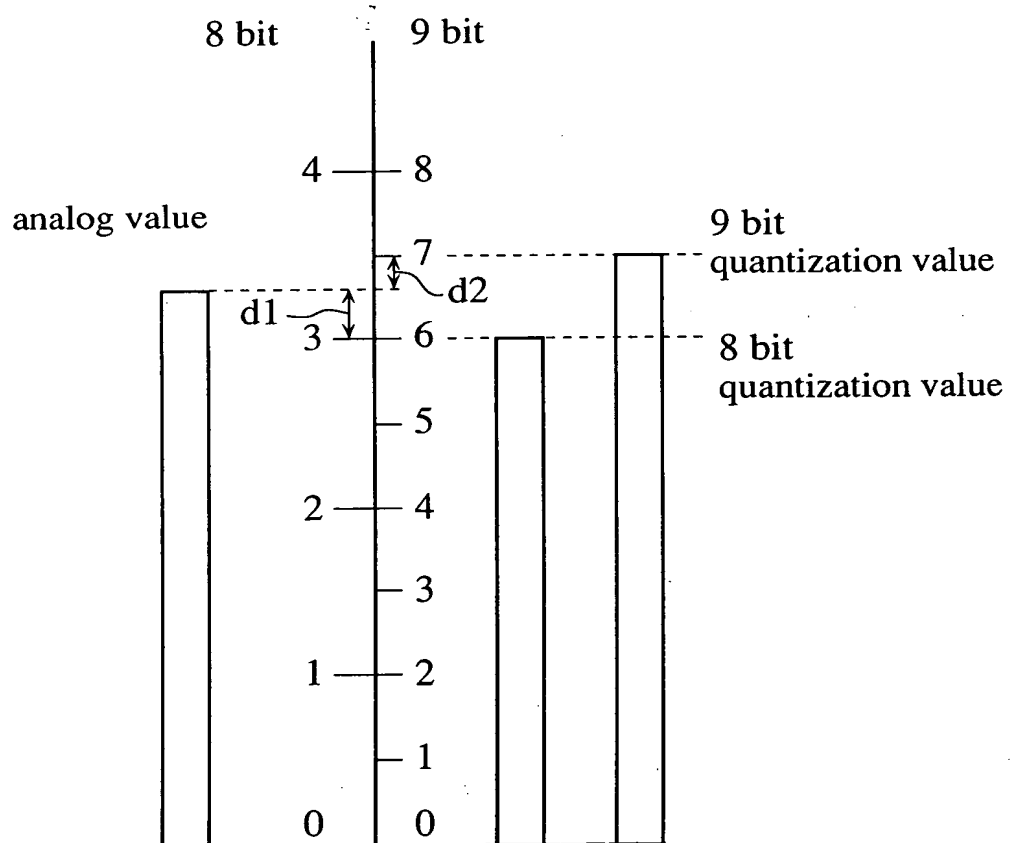
Fig.14





The diagram shows a graph of an analog signal over time. The vertical axis is labeled 'amplitude' and the horizontal axis is labeled 'time'. A continuous curve represents the 'analog source signal'. A horizontal line segment indicates the 'quantization step'. The signal is sampled at regular intervals, marked by vertical lines labeled j_1, j_2, j_3, j_4, j_5 . The time intervals between samples are labeled k_1, k_2, k_3 , with a note '1 sec/sampling frequency'.

Fig.17



reproduction quality information for digital sound data

reproduction quality information for digital image data

Fig.18B

one generation copy $\frac{10}{100}$

Duplicate

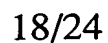
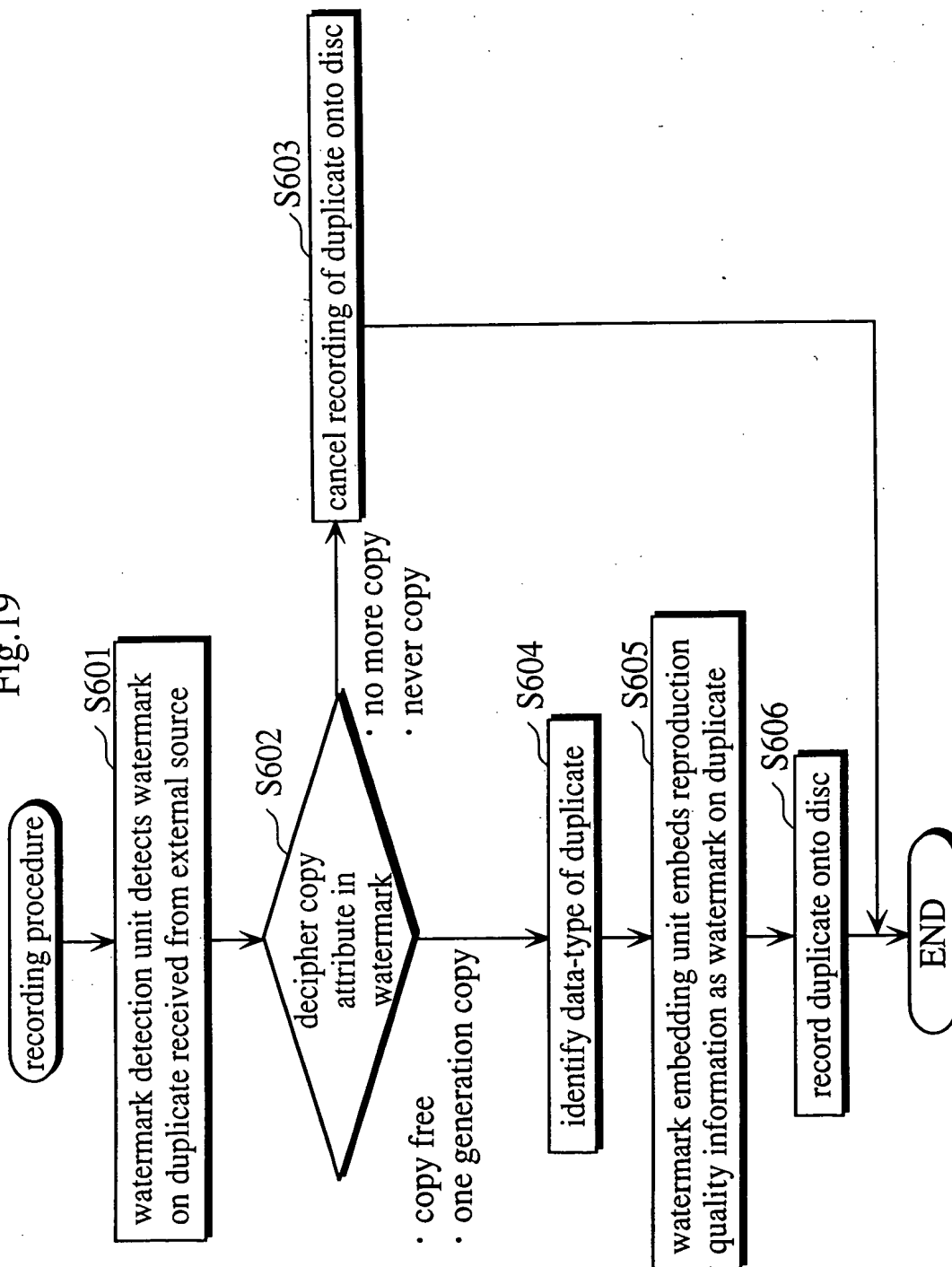


Fig. 19



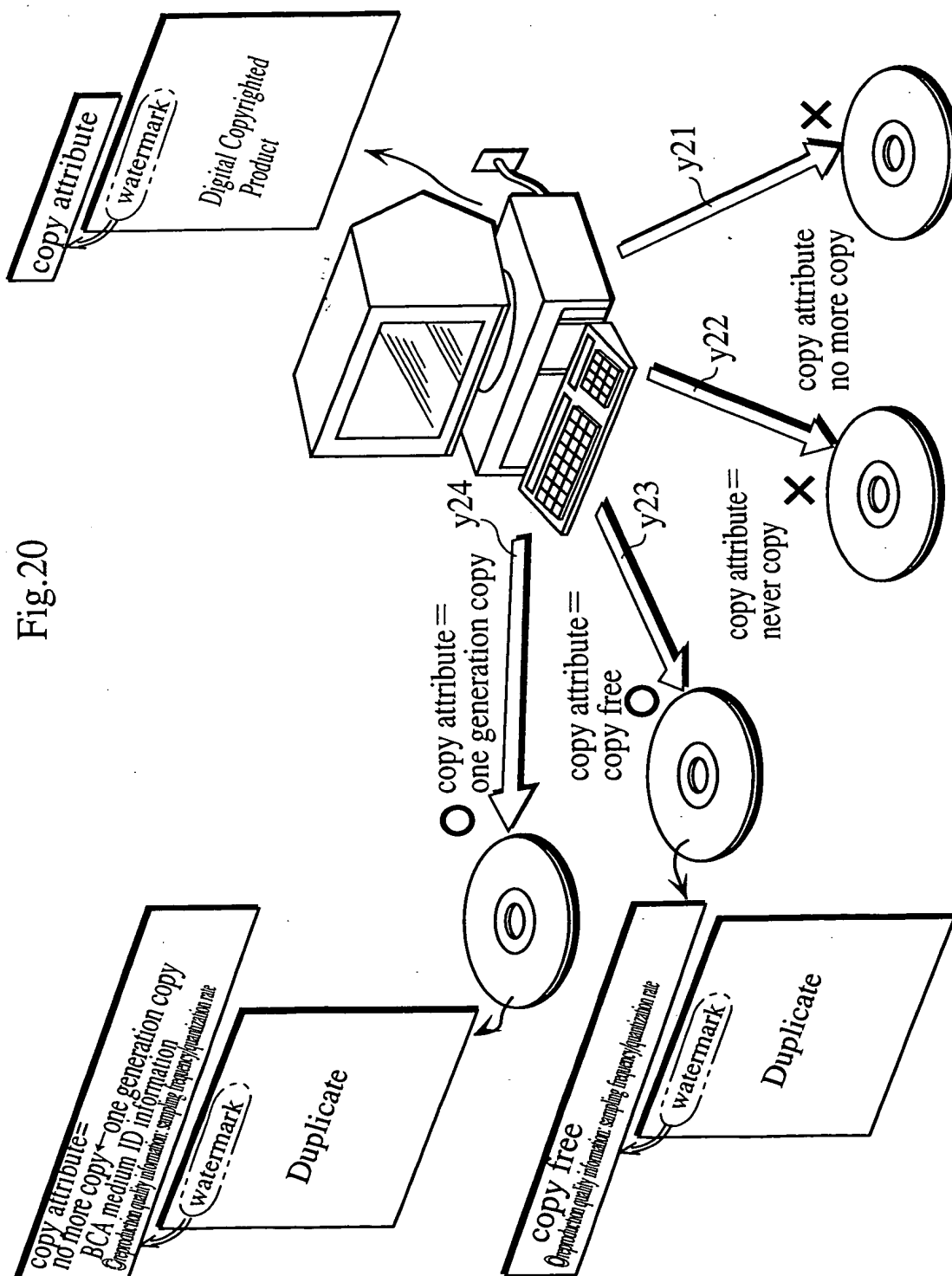


Fig.20

Fig.21

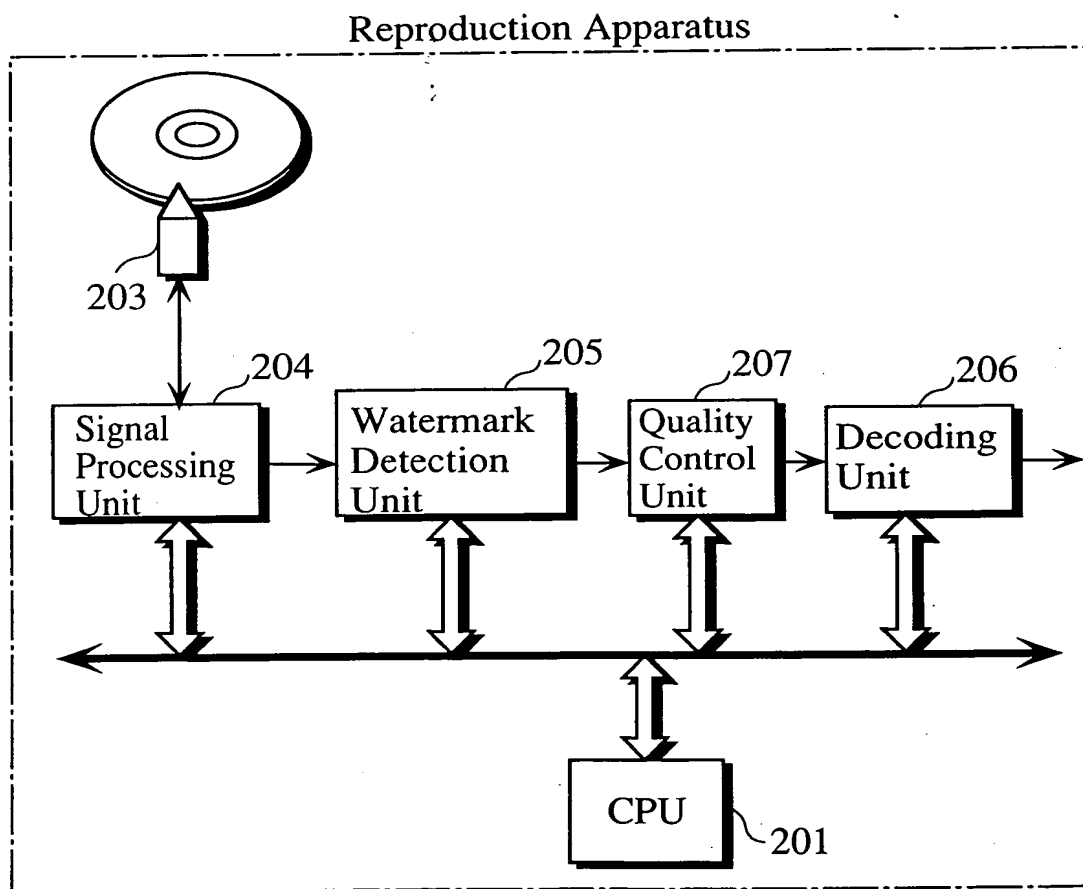


Fig. 22

```
graph TD
    Start([reproduction procedure]) --> S1001{acquire disc-type information}
    S1001 -- "read-only disc" --> S1003[S1003 watermark detection unit detects watermark on duplicate read from disc]
    S1001 -- "recordable disc" --> S1004{S1004 decipher copy attribute in watermark}
    S1003 --> S1005[cancel reproduction of duplicate]
    S1004 -- "copy free  
no more copy" --> S1007[instruct based on reproduction quality information in watermark]
    S1004 -- "one generation copy  
never copy" --> S1005
    S1007 --> S1002[reproduce duplicate]
    S1005 --> S1002
    S1002 --> End([END])
```

The flowchart illustrates the reproduction procedure, starting with a decision diamond S1001 to acquire disc-type information. If the disc is read-only, the process proceeds to S1003, where the watermark detection unit detects the watermark on the duplicate read from the disc, leading to S1005 (cancel reproduction of duplicate). If the disc is recordable, the process proceeds to S1004, where the decipher copy attribute in the watermark is determined. If the attribute is "copy free" or "no more copy", the process proceeds to S1007, where instructions based on reproduction quality information in the watermark are provided, leading to S1002 (reproduce duplicate). If the attribute is "one generation copy" or "never copy", the process proceeds to S1005 (cancel reproduction of duplicate). Both S1005 and S1007 lead to S1002, which finally leads to the END terminal.

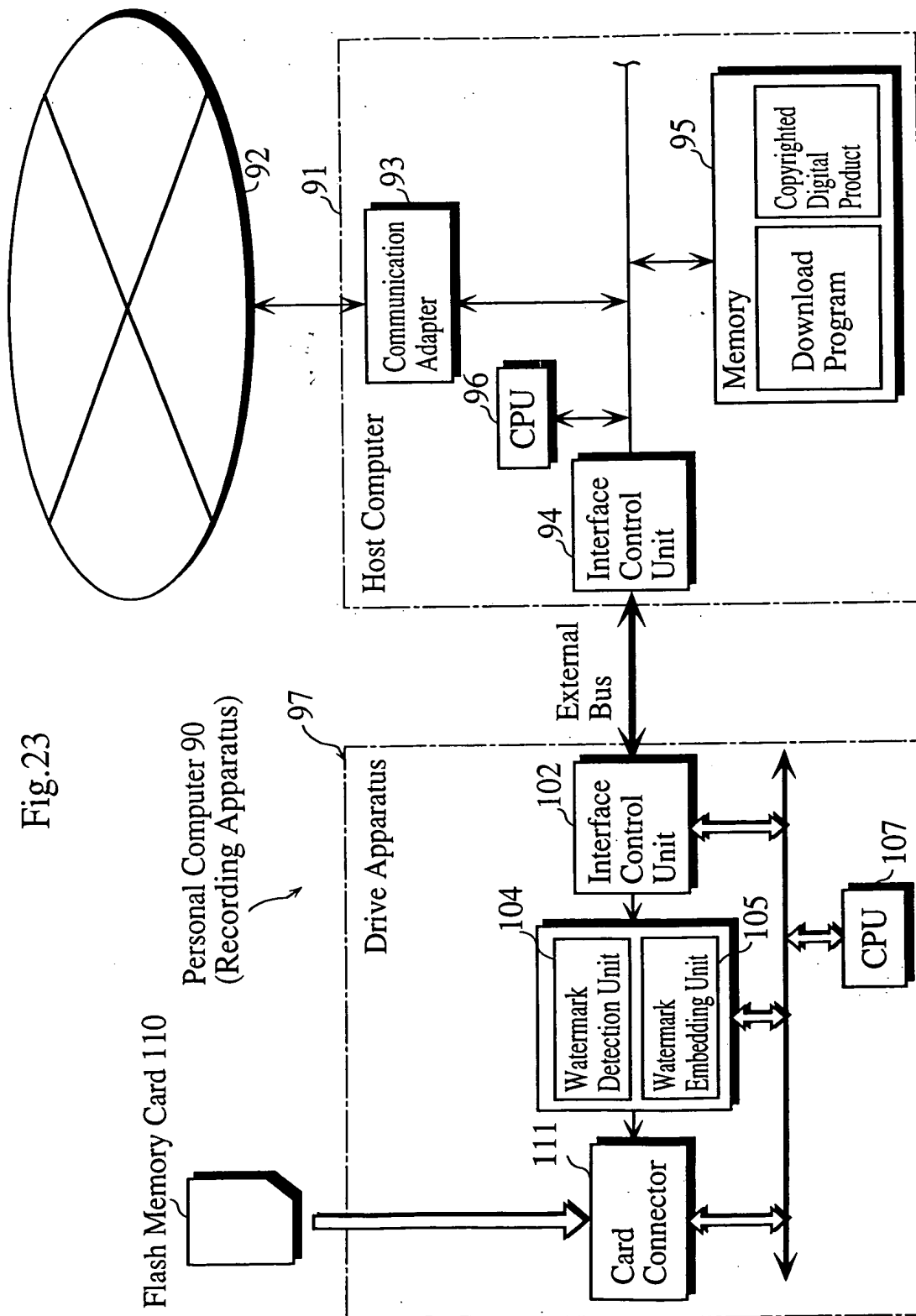


Fig.23

